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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,910	10/13/2005	Richard Kulak	60469-233; OT-5183	6900
64779 7590 11/28/2008 CARLSON GASKEY & OLDS 400 W MAPLE STE 350 BIRMINGHAM, MI 48009				
EXAMINER				
COLON SANTANA, EDUARDO				
ART UNIT		PAPER NUMBER		
2837				
MAIL DATE		DELIVERY MODE		
11/28/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/552,910

**Applicant(s)**

KULAK ET AL.

**Examiner**

Eduardo Colon-Santana

**Art Unit**

2837

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-9 and 13-19 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 10-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date 9/25/2008

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Individual Patent Application
- 6) ☒ Other: DETAILED ACTION

**DETAILED ACTION**

1. Applicant's response filed on 08/06/2008 have been received and entered in the case.
2. Applicant's response with respect to the claims has been considered but is still not persuasive. However, upon further consideration and a detailed review a new ground(s) of rejection is being made.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1, 5-9 and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiaki Fujita JP Patent No. 05116869A in view of Takahashi et al. JP 41011778.

Referring to claims 1, 5 and 9, Fujita discloses an elevator system (see all figures and respective portions of the specification). Fujita further depicts from figure 2, a roller guide assembly for an elevator system having a roller (10) having a vibration characteristic that varies responsive to a magnetic field produced by an adjacent magnetic field generator (23). Furthermore, Fujita depicts in figure 5 at least one guide rail (3), an elevator car (5) movable along the guide rail (3), and the roller (10) being supported for movement with the elevator car (5). The roller (10) is rolling along a surface of the guide rail (3). However, Fujita does not explicitly describe that the vibration characteristic of the roller (10) is varied by varying a hardness of a roller. Nonetheless, Takahashi et al. discloses an engagement roller (see figures 2-4) in an elevator system, wherein a roller (16) has a built in fluid chamber (17) wherein vibration characteristic is varied by varying the hardness of the roller (see pages 3-4 of translation).

Since Fujita and Takahashi are in the same field of endeavor regarding elevator systems, the purpose disclosed by Takahashi would have been recognized in the pertinent art of Fujita.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have a roller with vibration characteristic that varied by varying a hardness of the roller as taught by Takahashi within the teachings of Fujita regarding a vibration characteristic that varies responsive to a magnetic field for the purpose/advantages that by changing the roller hardness of an

elevator system by a magnetic field, the dampening characteristic and ride quality will greatly improve while absorbing the effects of vibration in a more efficient manner in various operational conditions.

As to claim 6, Fujita depicts in figure 5, a plurality of rollers (10) and a plurality of magnetic field generators (23).

Referring to claims 7 and 8, even though Fujita discloses a magnetic field generator (23) forming an electromagnet, the use of permanent magnet is also readily available and well known in the art.

As to claim 13, Fujita depicts in figure 5, a plurality of rollers (10) and a plurality of magnetic field generators (23).

Referring to claims 14 and 15, Fujita discloses a controller (25) that selectively and individually controls the magnetic field generators (23). Additionally, including a sensor device (24) that provides information regarding orientation of the elevator car (5) and the controller receiving information from this sensor to responsively control the magnetic field generator to vary the roller hardness.

As to claim 16, the method steps are obvious in the product structure of claims 1, 9, 14 and 15 above.

Regarding claims 17-19, the limitations with regard to the roller being provided with a magnetic fluid (22) having a viscosity that changes responsive to a magnetic field is shown by Fujita. Furthermore, the use of controller (25) and sensor (24) to vary the strength of the magnetic field independently for each roller (10) and

determining the level of vibration of the car (5) as the car moves along the guide rail (3) is also taught by Fujita.

***Allowable Subject Matter***

4. Claims 2-4 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not disclose a roller containing a fluid, wherein the fluid has a viscosity that changes responsive to a magnetic field.

***Response to Arguments***

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Colon-Santana whose telephone number is (571)272-2060. The examiner can normally be reached on Monday thru Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on (571) 272-2800 X.37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eduardo Colon-Santana/  
Patent Examiner  
Art Unit 2837

/ECS/  
November 21, 2008

/Walter Benson/  
Supervisory Patent Examiner, Art Unit 2837